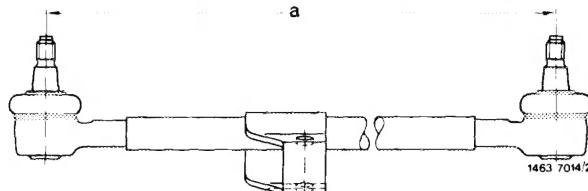


## 46-550 Removal and installation of drag link

### Data

1st version	2nd version	Steering layout	Length "a"
116 460 06 05	116 460 09 05	lefthand steering	477 $\pm$ 0.5
123 460 09 05	123 460 12 05	righthand steering	486 $\pm$ 0.5



### Approved grease types for ball joints

Multi-purpose grease	refer to specifications for service products page 267
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Tightening torques	Nm
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Castle nut for attaching drag link to steering arms	35
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Hex screw for attaching steering shock absorber to drag link	45
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### Special tool

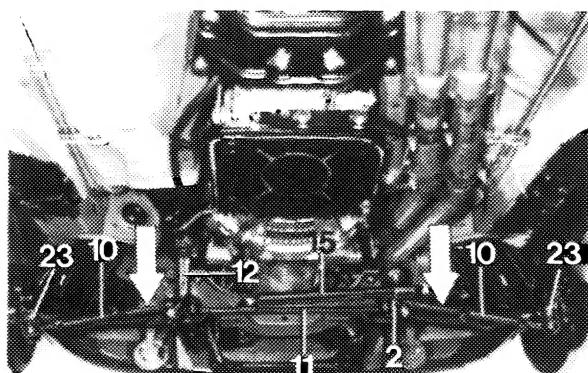
Puller for ball joints of drag link	 11004-7229	123 589 09 33 00
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### Self-made tools

Assembly sleeve for flat-wire clamping ring	refer to Fig. item 11, note
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Assembly sleeve for plastic ring	refer to Fig. item 11, note
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- 2 Pitman arm
- 10 Track rod
- 11 Drag link
- 12 Intermediate steering arm
- 15 Steering shock absorber
- 23 Steering knuckle arm

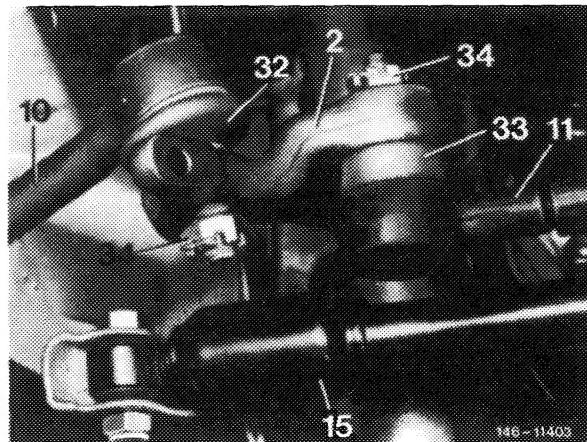


146-11433

## Removal

1 Uncotter castle nut (34) on joints of drag link and unscrew.

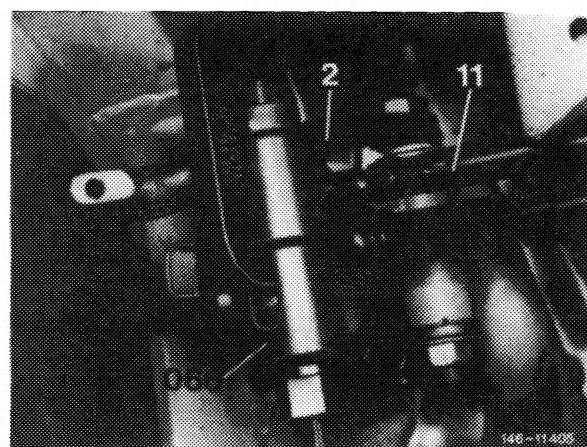
2 Unscrew hex. screw for fastening steering damper and force steering damper out of holder.



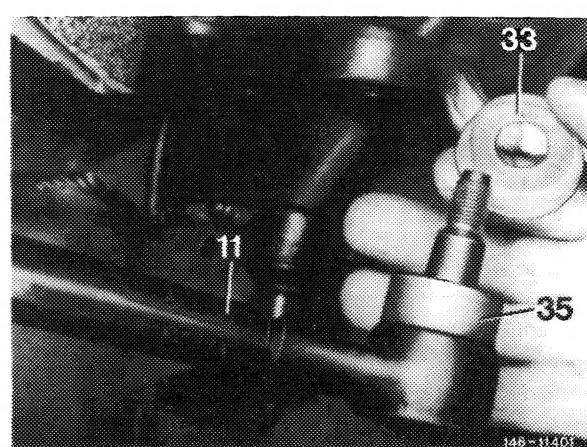
3 Force ball joints of drag link (11) from steering arms by means of puller (066).

**Note:** To prevent damaging rubber sleeve on drag link 2nd version, remove drag link with modified puller 123 589 09 33 00 only.

Puller 123 589 00 33 00 may be used only if puller bell has been refinished.



4 With drag link 1st version, remove plastic cover (33) and sealing ring (35).

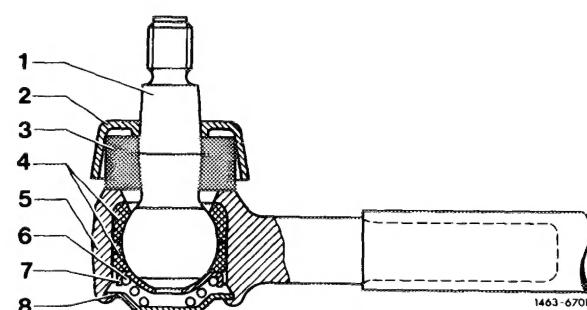


## Checkup

### 1st version

5 Check joints (1) of drag link. If joints are moving too easily or in the event of play be sure to replace drag link.

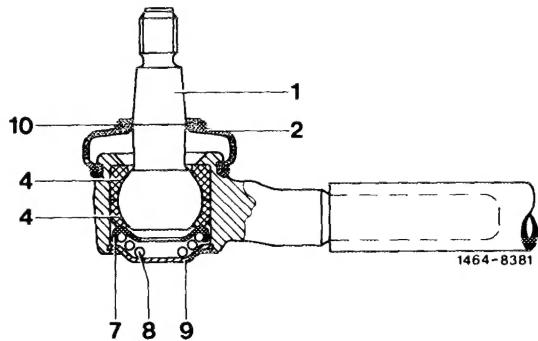
- 1 Ball pin
- 2 Plastic cover
- 3 Sealing ring
- 4 Plastic bearing shell
- 5 Ball head
- 6 Compression spring
- 7 Socket
- 8 Closing cover



## 2nd version

6 Check joints of drag link. If joints are operating too loosely or if there is any play, replace drag link.

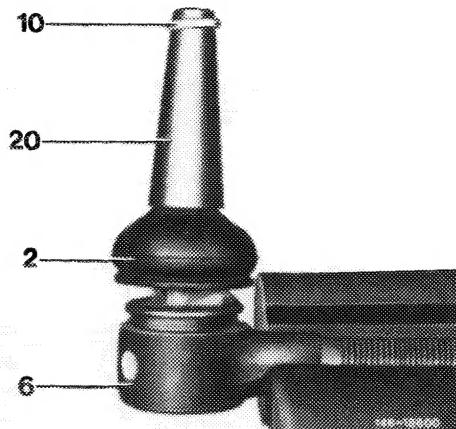
7 Check rubber sleeve (2) for joints. If a damaged rubber sleeve shows up on used joints, replace drag link.



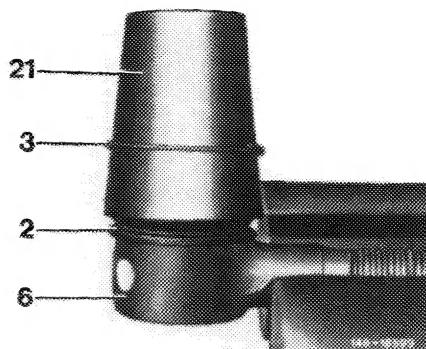
8 If rubber sleeve (2) has been damaged during removal of drag link, replacing rubber sleeve will be enough. For this purpose, remove flat-wire clamping ring (3) and pull-off sleeve including plastic fastening ring (10).

9 Prior to positioning new rubber sleeve, fill space between sleeve and joint with specified grease.

10 Place rubber sleeve (2) and then assembly sleeve (20) on ball pin. Insert plastic fastening ring (10) over assembly sleeve in rubber sleeve.

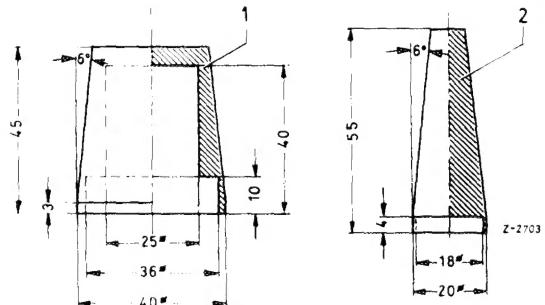


11 Place assembly sleeve (21) on ball joint and over rubber sleeve (2) and insert flat-wire clamping ring (3).



**Note:** Assembly sleeves are self-made according to specified dimensions.

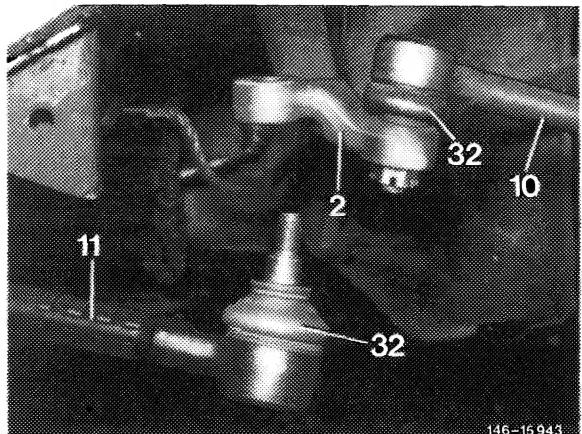
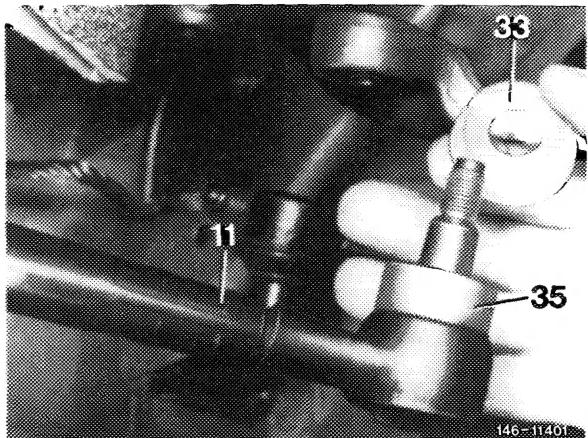
- 1 Assembly sleeve for flat-wire clamping ring
- 2 Assembly sleeve for plastic ring



**Note:** Maintenance-free joints are provided with grease for life. On these joints, the seal which prevents the entry of dirt is of decisive importance for the life of the joint. A damaged rubber sleeve should therefore be immediately replaced, since otherwise the penetrating dirt may result in wear of joints. For this reason, make sure that the joints are carefully checked at regular intervals.

## Installation

- 12 With drag link 1st version, replace sealing ring (35) and plastic cover (33).

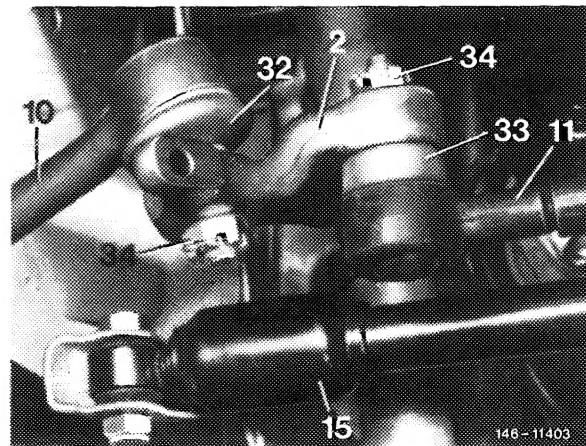


13 Clean ball pin as well as conical seats in steering arms perfectly from grease. Push ball pins tightly into cone of steering arms. Screw on castle nuts and cotter. Tightening torque 35 Nm -- reference value.

14 Fasten steering damper to drag link.

15 Check wheel adjustment on front axle (40–320).

Drag link 1st version



Drag link 2nd version

